

CLAIMS

1 An optical information recording medium having a land/groove structure and being capable of recording at a plurality of linear velocities:

5 wherein the ratio (SH/SL) of the maximum recordable linear speed (SH) to the minimum recordable linear speed (SL) has a value of 2 to 3; and

the ratio (RG/RL) of the amount of light reflected from a groove (RG) in an unrecorded state to the amount of light reflected from a land (RL) in an unrecorded state has a value of at least 1.08 and no more than 1.19.

10 2 The optical information recording medium according to Claim 1, wherein the amount of light reflected from the groove (RG) and the amount of light reflected from the land (RL) are measured by optical units in which the light source has a wavelength of 660 ± 10 nm and a numerical aperture (NA) of 0.6 ± 0.01 .

15 3 The optical information recording medium according to Claim 1 or 2, wherein the recording or reproduction of information is performed by utilizing a phase change in the land/groove structure.

4 The optical information recording medium according to any of Claims 1 to 3, wherein the ratio (WG/TP) of the groove half-value width (WG) to the track pitch (TP) has a value that satisfies $0.50 < (WG/TP) < 0.60$.

20 5 The optical information recording medium according to Claim 4, wherein the depth of the groove is from 40 to 65 nm.

6 An optical information recording and reproduction system for recording to and reproducing from the optical information recording medium according to any of Claims 1 to 5:

being capable of recording at a plurality of linear velocities; and

25 comprising optical units in which the light source has a wavelength of 660 ± 10 nm and a numerical aperture (NA) of 0.6 ± 0.01 ;

wherein recording and reproduction are possible when the ratio (SH/SL) of the maximum recordable linear speed (SH) to the minimum linear speed (SL) has a value of 2 to 3.